

**ABSTRACT OF THE DISCLOSURE**

An anti-fuse is manufactured by forming an isolation region including an insulating material layer buried in a surface of a device formation region on a surface of a semiconductor substrate, and by forming diffusion regions at both sides of the isolation region, then by contacting electrodes to the respective diffusion regions. The anti-fuse is initially in a non-conductive state, and is programmed to be in a permanently conductive state by a simple writing circuit.